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REMARKS

Claims 1-62 are pending in this application. Claims 10 and 20-62 have been withdrawn due to the finality of the Restriction Requirement and, as a result, have now been canceled without prejudice or disclaimer. For purposes of expedition, claims 1-9 and 11-19 have been amended in several particulars for purposes of clarity and brevity, in accordance with current Office policy, to further and alternatively define Applicants' disclosed invention and to assist the Examiner to expedite compact prosecution of the instant application.

Claims 1-6 and 11-16 have been rejected under 35 U.S.C. §102(e) as being anticipated by Dibene II et al., U.S. Patent No. 6,452,113 for reasons stated on pages 3-6 of the Office Action (Paper No. 8). Similarly, claims 7-9 and 17-19 have been rejected under 35 U.S.C. §102(e) as being anticipated by, or in the alternative, as being unpatentable over Dibene II et al., U.S. Patent No. 6,452,113 for reasons stated on pages 6-9 of the Office Action (Paper No. 8). For purposes of expedition, and without addressing the incorrectness of the rejections of claims 1-9 and 11-19 under either 35 U.S.C. §102(e) or 35 U.S.C. §103 as being anticipated or obvious by Dibene '113, independent claims 1 and 11 have been extensively amended to define an IC package provided with a substrate supporting a die, and a package stiffener or a capacitor stiffener (a single component) mounted on the substrate that is used to deliver low-inductance current to the die, via the substrate, while concurrently providing stiffening support to the substrate. See FIG. 6 for the arrangement

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between the package stiffener 610 and the die 120 mounted on a substrate 110. See FIG. 7 for the configuration of the package stiffener 610 in a form of a split copper (Cu) ring. See FIG. 9 and FIG. 10 for the arrangement between the capacitor stiffener 910 and the die 120 mounted on a substrate 110.

Specifically, independent claim 1 has been amended to define an integrated circuit (IC) package comprising:

a substrate supporting at least a die; and
a package stiffener mounted at a perimeter of the substrate, and
arranged apart from the die on the substrate to deliver low-inductance
current to the die, via the substrate, while concurrently providing
stiffening support to the substrate.

Likewise, independent claim 11 has been amended to define an integrated circuit (IC) package comprising:

a substrate supporting at least a die; and
a capacitor stiffener mounted at a perimeter of the substrate,
and arranged apart from the die on the substrate to deliver low-
inductance current to the die, via the substrate, while concurrently
providing stiffening support to the substrate.

These features as now defined in each of Applicants' independent claims 1 and 11 are not disclosed or suggested by Dibene II et al., U.S. Patent No. 6,545,113. For example, the cited FIG. 6B of Dibene '113 only shows the use of a "power regulation module" 600 including a circuit board 602 to supply power to a power dissipating element such as a processor. Thermal vias 606 are arranged within the circuit board 602 to provide an electrical path for the components and to

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transfer heat from the surface of the circuit board 602. The cited FIG. 9 of Dibene '113 only shows the assembled modular circuit board assembly 800.

No where in Dibene '113 is there any disclosure of Applicants' claimed "package stiffener" or "capacitor stiffener mounted at a perimeter of the substrate, and arranged apart from the die on the substrate to deliver low-inductance current to the die, via the substrate, while concurrently providing stiffening support to the substrate" as expressly defined in each of Applicants' base claims 1 and 11.

The rule under 35 U.S.C. §102 is well settled that anticipation requires that each and every element of the claimed Invention be disclosed in a single prior art reference. In re Paulsen, 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994); In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). Those elements must either be inherent or disclosed expressly and must be arranged as in the claim.

Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989); Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 7 USPQ2d 1057 (Fed. Cir. 1988); Verdegall Bros., Inc. v. Union Oil Co., 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987). The corollary of that rule is that absence from the reference of any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 230 USPQ2d 81 (Fed. Cir. 1986).

The burden of establishing a basis for denying patentability of a claimed invention rests upon the Examiner. The limitations required by the claims cannot be ignored. See In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). All claim limitations, including those which are functional, must be considered. See In re

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Oelrich, 666 F.2d 578, 212 USPQ 323 (CCPA 1981). Hence, all words in a claim must be considered in deciding the patentability of that claim against the prior art. Each word in a claim must be given its proper meaning, as construed by a person skilled in the art. Where required to determine the scope of a recited term, the disclosure may be used. See In re Barr, 444 F.2d 588, 170 USPQ 330 (CCPA 1971).

Likewise, "obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." ACS Hospital System, Inc v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). The Examiner must point to something in the prior art that suggests in some way a modification of a particular reference or a combination of references in order to arrive at Applicants' claimed invention. Absent such a showing, the Examiner has improperly used Applicants' disclosure as an instruction book on how to reconstruct to the prior art to arrive at Applicants' claimed invention.

In the present situation, Dibene '113 fails to disclose and suggest all features of Applicants' base claims 1 and 11 and their respective dependent claims 2-9 and 12-19. Therefore, Applicants respectfully request that the rejection of claims 1-9 and 11-19 be withdrawn.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is

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requested to telephone Applicants' attorney at the Washington DC area office at
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Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (219.40442X00).

Respectfully submitted,

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